

### **AMENDMENTS TO THE SPECIFICATION**

Please **amend** the paragraph beginning on line 8 of page 2 as follows.

The aforementioned U.S. Patent 5,572, 552 also describes that, in a case in which there is mixed own-cell and other-cell interference, i.e., interference from signals transmitted in other cells, optimum reception may be achieved by combining despread values using combining weights that partly resemble prior art RAKE taps and partly resemble an inverse channel equalizer. Such a receiver has been referred to as a generalized RAKE (G-RAKE) receiver and may include variations in which values are despread or despread values are combined to achieve interference cancellation. Combining coefficients in such a receiver may be computed from estimates of the multipath channel coefficients together with autocorrelation coefficients for the interference. A G-RAKE receiver may also incorporate techniques introduced in ~~pending U.S. Serial No. 09/165,647~~ U.S. Patent No. 6,363,104 to G.E. Bottomley entitled, "Method and apparatus for interference cancellation in a RAKE receiver," filed October 2, 1998; ~~U.S. Serial No. 09/344,899~~ U.S. Patent No. 6,714,585 to Wang et al. entitled, "RAKE combining methods and apparatus using weighting factors derived from knowledge of spread spectrum signal characteristics," filed June 25, 1999; ~~U.S. Serial No. 09/420,957~~ U.S. Patent No. 6,683,924 to Ottosson et al. entitled, "Apparatus and methods for selective correlation timing in RAKE receivers," filed October 19, 1999; and ~~U.S. Serial No. 09/420,957~~ U.S. Patent No. 6,922,434 to Wang et al. entitled, "Apparatus and methods for finger delay selection in RAKE receivers," filed April 30, 2001. The G-RAKE may use strategies for finger placement and combining weight design that suppress interference. The weights may be determined based on channel estimates and an estimate of the overall noise correlation matrix across fingers. Another example of a demodulator is the multi-stage RAKE introduced in ~~U.S. Serial No. 09/344,898~~ U.S. Patent No. 6,801,565 to Bottomley et al. entitled, "Multi-stage RAKE combining methods and apparatus," filed June 25, 1999.

Please **amend** the paragraph beginning on page 3, line 7 as follows.

U.S. Patents Nos. 5,557,645 and 5,619,513 to Dent describe that the number of states in a maximum least square estimation (MLSE) equalizer can be expanded beyond the number needed to deal with the multipath channel memory in order to accommodate more estimates of the multipath channel coefficients. ~~U.S. Patent Application Serial No. 09/426,374~~ U.S. Patent No. 6,520,910 to Bottomley et al., entitled "~~Look-ahead Channel Estimation~~" "Baseband processor with look-ahead parameter estimation capabilities" and filed October 25, 1999, describes that the number of states in a Viterbi MLSE equalizer can be further expanded to encompass extra channel estimates based on hypotheses of future symbols to be decoded.

Please **amend** the paragraph beginning on page 14, line 3 as follows.

The multi-process demodulator **630** also includes a G-RAKE processor circuit **631b**. The G-RAKE processor circuit **631b** includes a G-RAKE correlator circuit **632b** that correlates the one or more signal samples **625** with the spreading sequence **627** at correlation times that are selected based on the channel estimate **629** and information **623** on one or more interferer signals present in the signal represented by the one or more signal samples **625**. The G-RAKE correlator circuit **632b** produces second time-offset correlations **633b** that are combined by a G-RAKE combiner circuit **634b** that combines the second time-offset correlations **633b** according to combining weighting factors that are determined based on the spreading sequence **627**, the channel estimate **629** and the interferer information **623**, producing a second representation **635b** of the symbol. Examples of G-RAKE processor circuit structures and operations that may be used with the present invention are described in ~~U.S. Serial No. 09/344,899~~ U.S. Patent No. 6,714,585 to Wang et al. entitled, "RAKE combining methods and apparatus using weighting factors derived from knowledge of spread spectrum signal characteristics," filed June 25, 1999

and in ~~U.S. Serial No. 09/165,647~~ U.S. Patent No. 6,363,104 to G.E. Bottomley entitled,  
"Method and apparatus for interference cancellation in a RAKE receiver," filed October 2, 1998.

Please **amend** the paragraph beginning on page 19, line 28 as follows.

Other types of demodulator configurations that may be used with the present invention, in addition to or instead of the already described configurations, include interference subtractive decoders as described for example in U.S. Patent No. 5,151,919 to Dent entitled "CDMA subtractive demodulation." Another suitable type of interference subtractive decoder is described in ~~U.S. Patent Application Serial No. 09/426,374~~ U.S. Patent No. 6,570,910 to Dent entitled, "Baseband Processor with Look-Ahead Parameter Estimation Capabilities," filed October 25, 1999, assigned to the assignee of the present invention and incorporated herein by reference in its entirety. In other embodiments of the present invention, processes implemented by a multi-process demodulator may comprise a first RAKE process that combines correlations for all multipath rays for which a channel estimate is available, and a second RAKE process that combines correlations corresponding only to the strongest multipath rays having a signal strength greater than a predetermined signal strength threshold.